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## Financial Literacy and Financial Planning for Retirement "Case Studies on Employees PT. Adhi by Tbk. (Persero)"

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### ABSTRACT

The purpose of this study was to test the relationship between the level of financial literacy of PT. Adhi Karya Tbk (Persero) and its retirement plans. The data used in this study is primary data from the results of the distribution of the questionnaire form to PT employees. Adhi Karya Tbk. (Persero). The method used in this study is a survey method that intends to analyze data through the description of the data that has been obtained. Hypothesis testing in this study used multiple linear analysis. The results prove that financial behavior has an influence on retirement financial planning, while financial knowledge and attitudes have no effect

## **INTRODUCTION**

The importance of financial literacy for individuals, households and for a nation is obvious, where economic well-being at all levels is a function of financial choice for decision makers (Lopus et al., 2019). The Organization for Economic Co-Operation and Development or OECD in 2020 conducted a study focusing on the level of financial literacy in member states, where in the entire sample of individuals surveyed scored only 12.7 or just under 61% of the maximum financial literacy score, representing a set of basic knowledge and financially wise behaviors and attitudes.

Indonesia is ranked number six in the financial literacy survey based on OECD research. Indonesia's financial literacy index is 38.03% of the results in 2019 by the National Survey of Financial Literacy and Inclusion (SNLIK) (OJK, 2021). This shows that generally the Indonesian people do not understand well the characteristics of the various financial products and services available. So it is important to improve financial literacy for the community so that effective financial planning can be achieved.

In accordance with the statement from the OJK (2021), financial literacy is divided into four levels of financial literacy. The first level is well literate, where a person has knowledge and confidence about financial service institutions and financial service products, including features, benefits and risks, rights, and obligations related to financial products and services. In addition to knowledge at this level they can already use financial products and services. The second level is sufficient literate, having knowledge and confidence about financial services institutions and financial products and services. Individuals have also become aware of the details of product features, benefits, and risks of the product, rights and obligations of owning financial products and services. The third level is low literate, knowing only financial services institutions, products, and financial services. The fourth level is not literate, where individuals do not have knowledge about financial service institutions including products from financial services, at this level individuals are also not able to use financial products and services.

One of the products of financial services is a pension fund. Pension funds are funds that are collected and managed by a company or organization and will be given to workers when they enter retirement. The funds raised from so many years of working in the company usually amount to quite a lot and are given to workers gradually or even all at once. For this reason, financial literacy is very important for workers to be able to manage their pension funds so that they can be enjoyed when retired workers no longer have a fixed income (Lusardi & Mitchell, 2014).

Operationally, the receipt of the proceeds from the pension fund of PT. Adhi Karya Tbk. will be received in full after retiring from the company, it is a concern for researchers to know the planning of the fund management after it no longer works. It is hoped that the receipt of the pension fund can have an impact on financial well-being for employees in the future after no longer working in the company.

## **LITERATURE REVIEW**

Financial literacy is the basic need of every human being in order to avoid financial problems (Yushita, 2017). Noctor, Stoney and Stradling (1992) define financial literacy as the ability to properly assess and make effective decisions about the use and management of money. In measuring the level of financial literacy, a structure is needed to measure an individual's ability to manage money effectively (Huston, 2010). Literature search related to financial literacy by Remund (2010) conceptually there are five categories of financial literacy: (1) knowledge of financial concepts, (2) ability to communicate about financial concepts, (3) talent in managing personal finances, (4) skills in making appropriate financial decisions and (5) confidence in planning effectively for future financial needs. These five financial concepts are the basis for individuals to compile sustainable financial planning such as retirement financial planning which aims to achieve economic prosperity in the future.

### **Dimensions of Financial Literacy**

In the financial literacy literature, there are three dimensions that are used as the basis for measuring the level of financial literacy. This research refers to the OECD (2020) which divides the dimensions of

financial literacy, namely: 1.) Dimensions of Financial Knowledge; 2.) Dimensions of Financial Behavior; 3.) Dimensions of Attitude Towards Finance.

### **Dimensions of Financial Knowledge**

Financial knowledge is a basic component in financial literacy, it is used by individuals to choose financial products and services and provide knowledge for good decision making. Investing in financial knowledge can have important consequences for retirement well-being by affecting people's ability to save and invest (Lusardi et al., 2017). Knowledge is clearly a major component in making a financial decision (Robb & Woodyard, 2011). In financial planning, knowledge becomes the basis for decision making, knowledge of financial products, risks inherent in financial instruments, calculation of returns will have an impact on the results that will be obtained in the future.

### **Financial Behavior Dimension**

Financial behavior plays a role in shaping the financial situation and financial well-being. There are several financial behaviors that negatively affect financial problems such as failing to save actively, delaying bill payments, failure to plan expenses for the future or choosing financial products without getting good information (OECD, 2020). Financial literacy provides a background to the successful participation of a person in economic activity by means of increasing the amount of savings, correct purchasing decisions, appropriate investments, asset management, using insurance, debt, credit management and improving financial well-being (Taft et al., 2013). Three financial behaviors that reflect the principle of prudence in finance such as; 1.) Long-term savings and planning; 2.) Make considerations before the purchase decision; 3.) Always keep track of cash flow. It is hoped that this behavior can have an impact on good financial behavior.

### **Dimensions of Financial Attitude**

According to Ajzen (1991), an attitude towards finance is the result of a certain behavior of a person who makes decisions and his attitude can be rooted through individual economic and non-economic beliefs. Attitude is a complementary component in financial literacy, where the component is expected that each individual has an attitude in the long-term use of finance. The statement of the financial attitude of each individual consists of the attitude of the

individual's view of the money itself, the attitude towards savings and the attitude towards the long-term financial plan.

### **Factors Affecting Financial Literacy**

There are a number of factors that affect the financial literacy of each individual. Referring to Firli (2017), categorizing various factors that affect financial literacy against four main variables including: 1) Personal Socio-Demographic Characteristics; 2) Financial Knowledge; 3) Financial Conduct; 4) Financial Attitude; 5) Financial Training.

### **Retirement Financial Planning**

A plan will form attitudes and behaviors to achieve the goals already planned. According to Rameli & Marimuthu (2018), Retirement planning behavior is defined as people's behavior towards their retirement planning. In developed countries, individuals bear great responsibility in managing their pension schemes, as is the case in Japan (Ming-Yeh & Yue, 2021). This is based on the trust of the employees themselves. Ricci & Caratelli (2017) found that trust has a positive influence either on the decision to enter a private pension scheme or to devote severance pay to a private pension scheme.

#### **Hypothesis Development**

H1: The level of financial knowledge affects retirement financial planning

H2: Financial behavior affects retirement financial planning

H3: Financial planning attitudes affect retirement financial planning

H4: The dimension of financial literacy affects retirement financial planning.

The hypothesis in this study was developed by researchers empirically from the fact that the company PT. PT. Adhi Karya Tbk. (Persero) is committed to ensuring and guaranteeing its permanent employees that at the time of retirement they will receive pension funds according to applicable calculations. On this basis, it is necessary to measure the level of financial literacy in company employees as well as retirement planning prepared by each individual.

Previous research related to the relationship between financial literacy and retirement planning has been quite developed, Safari et al (2021) revealed that financial literacy has a significant impact on personal retirement planning in accordance with the ability to calculate and individual financial

knowledge. Hutabarat & Wijaya (2020) found that there is a positive relationship between financial literacy and retirement planning as measured by the level of financial literacy for employees and lecturers at the University of Indonesia.

In addition, there is an increase in awareness from government agencies and the public to understand financial literacy as a way to manage financial planning and design pension strategies (Gallego-Losada et al., 2021). The research of Tomar et al (2021) found a positive relationship from the perspective of future time, clarity of retirement goals, and support of social groups with retirement planning behaviors, moderated by financial literacy.

## **METHODS**

### **Samples and Types of Research**

This research is included in the type of descriptive research with survey methods. This type of research intends to analyze data through describing the data that has been obtained without having to provide conclusions that apply broadly or are generalized (Sugiyono, 2019). The number of samples in this study was 97 employees who were sampled at PT Adhi Karya Tbk. (Persero) from a total population of 2,758 known people as of December 31, 2020. The sample criteria in this study are:

- a. Individuals with the status of permanent employees and direct contracts;
- b. Length of work for at least 2 years;
- c. The age of the individual is at least 30 years and;
- d. Employees who are beginning to enter retirement

### **Types, Sources and Techniques of Data Collection**

The type of data used in this study are respondents who will be involved in the study, who are expected to provide information on the variables to be studied. In this study, the subjects of the study were employees of PT. Adhi Karya Tbk. (Persero). The technique used in collecting data in this study was carried out by conducting a series of tests through a set of questionnaires that could measure

the level of financial literacy and the tendency of respondents in retirement planning. researchers refer to three dimensions in financial literacy and retirement planning developed by the Organization for Economic Co-Operation and Development (OECD). A series of tests will be loaded on the questionnaire form which will be distributed to PT. Adhi Karya Tbk. (Persero).

## **Data Analysis Methods**

### **Descriptive Analysis**

Descriptive statistical analysis is used in this study to analyze the data by describing and making conclusions in general. Descriptive statistics aims to provide an overview or describe a data seen from standard deviation, average, minimum, maximum, variance, kurtosis and skewness (distribution steam) whose results can be qualitative or quantitative data (Ghozali, 2001).

### **Hypothesis Test**

To analyze the relationship between financial literacy and retirement financial planning, researchers used a multiple linear regression test using the SPSS 25 measuring instrument. The model of the multiple linear regression equation is as follows:

$$Y(RP) = a + bKL + bFB + bFA + e$$

Where:

Y(RP) = Retirement Financial Planning

a = constant

b = Coefficient of an independent variable

KL = Financial Knowledge

FB = Financial Behavior

FA = Financial Planning Attitude

E = error

## RESULTS AND DISCUSSION

In this section the researcher will display descriptive statistics of the respondent data collected. The data presented will be certain categories such as, gender, recent education, employment status, place of work, type of work. The respondents in this study consisted of 83 men and 16 women with permanent employee staffing status, as many as 6 men and 2 women with the status of Direct Contract Employees, as many as 19 men and 2 women with the status of Indirect Contract Employees. In this study, there were 10 men with Vocational High School (SMK) education backgrounds, as many as 24 men and 3 women with Diploma III (D3) education backgrounds, as many as 69 men and 15 women with Strata I (S1) education backgrounds and

as many as 5 men and 2 women with Strata II (S2) education backgrounds. The age range of respondents in this study was 30 men and 3 women in the age range of less than 30 years, as many as 31 men and 11 women in the age range between 31 years to 45 years, as many as 38 men and 6 women in the age range of 46 to 55 years and 9 men in the age range over 56 years. In this study, there were 35 men and 8 women who had a work period of less than 1 year, as many as 33 men and 10 women had a work period of 1 year to 3 years, as many as 5 men and 1 woman had a work period of 3 to 5 years and 35 men and 1 woman had a working period of more than 5 years.

### Financial Literacy the Dimension of Knowledge

Table 1. Classification of Financial Literacy Levels Dimensions of Financial Knowledge

Interval Class	Knowledge Levels	Number (org)	Percentage (%)
6-7	Good	33	25%
4-5	Good Enough	70	55%
2-3	Not Good Enough	21	16%
0-1	Low	4	3%
<b>Sum</b>		<b>128</b>	<b>100%</b>

Source: Primary Data Processed, 2022

The results of the classification of financial literacy levels on the financial knowledge dimension show that as many as 25% of respondents are in the good category which means they have a good level of financial knowledge, 55% of respondents are in the category of quite good which means

they have a fairly good level of financial knowledge, 16% of respondents are in the category of not good which means they have a low level of financial knowledge and 3% of respondents are included in the category of financial literacy level low one.

### Financial Literacy Financial Behavior Dimensions

Table 2. Classification of Financial Literacy Levels Financial Behavior Dimensions

Interval Class	Levels of Behavior	Number (org)	Percentage (%)
7-9	Good	73	57%
4-6	Good Enough	47	37%
1-3	Not Good Enough	8	6%
<b>Sum</b>		<b>128</b>	<b>100%</b>

Source: Primary Data Processed, 2022.

The results of the classification of financial literacy levels on the financial behavior dimension show that as many as 57% of respondents are in the good

category which means they have a good level of financial behavior, 37% of respondents are in the

category of quite good which means they have a fairly good level of financial behavior, 6% of

respondents are in the category of not good which means they have a low level of financial behavior.

### Financial Literacy Attitude Dimensions

Table 3. Classification of Financial Literacy Levels Dimensions of Financial Attitudes

Interval Class	Levels of Behavior	Number (org)	Percentage (%)
11-15	Good	54	42%
6-10	Good Enough	71	55%
1-5	Not Good Enough	3	2%
<b>Sum</b>		<b>128</b>	<b>100%</b>

Source: Primary Data Processed, 2022.

Statistically shows that as many as 42% of respondents are in the good category which means they have a good financial attitude, 55% of respondents are in the category of quite good which means they have a fairly good financial attitude, 2% of respondents are in the category of not good which means they have a low financial attitude.

Retirement Financial Planning Level

planning is a series of strategies in managing fund allocation with the aim of realizing financial expectations to be achieved in the future (Hutabarat & Wijaya, 2020). Researchers in this case measure the level of retirement financial planning for PT employees. Adhi Karya Tbk (Persero).

The classification of the level of financial planning for the retirement of PT. Adhi Karya Tbk. (Persero) is shown in table 4.

Table 4. Classification of Retirement Financial Planning Levels

Score Range	Planning Tiers	Number (org)	Percentage (%)
21-25	Well Planned	49	38%
16-20	Simply Planned	58	45%
11-15	Less Planned	20	16%
5-10	Unplanned	1	1%
<b>Sum</b>		<b>128</b>	<b>100%</b>

Source: Primary Data Processed, 2022.

The results of the classification of the level of financial planning for the retirement of PT. Adhi Karya Tbk. (Persero) showed that as many as 38% of respondents have a well-planned level of retirement financial planning, 45% of respondents have a fairly planned level of retirement financial planning, 16% of respondents have an unplanned level of retirement financial planning and as many as 1% of respondents have an unplanned level of planned retirement financial planning.

## RESULTS

### t-test (Partial)

The partial test (t test) is used to determine the influence of each independent variable. Based on the number of samples in the study as many as 128 samples, the t-table value in this test based on the t distribution table is 1,656. So that the results of the partial test (t test) in the study are as follows:

Table 5. Partial Testing (t-test)

Independent Variables	B	t-count	Sig.	Decision
Constant	15.027		0.000	
Financial Knowledge	0.111	0.472	0.638	H1 rejected
Financial Conduct	0.400	2.244	0.027	H2 accepted
Financial Attitude	0.134	1.077	0.284	H3 is deprecated

a. Independent Variables: Retirement Financial Planning

Source: primary data processed, 2022.

Based on the table above, it shows that Financial Behavior affects retirement financial planning. To determine the significance of the influence of these three variables on Retirement Financial Planning at the level of 5% is as follows:

1. H1 Hypothesis Testing (Financial Knowledge)

From the results of the estimation of the Financial Knowledge (KL) variable, a t-count value = 0.427 with a probability of 0.636 was obtained. Where the t-count value < t-table and the significance value above 0.05 show that the Financial Knowledge variable has no significant effect on Retirement Financial Planning at the level of 5%. Thus the decision of the **H1 Hypothesis is not accepted.**

2. H2 Hypothesis Testing (Financial Behavior)

From the results of the estimation of the Financial Behavior variable (FB) obtained the value of t-count = 2.244 with a probability of 0.027. Where the t-count value > t-table and the significance value below 0.05 indicate that the Financial Behavior variable has a significant effect on Retirement Financial Planning at the level of 5%. Thus the decision of the **H2 Hypothesis is accepted.**

3. H3 Hypothesis Testing (Financial Attitudes)

From the results of the estimation of the Financial Attitude (FA) variable, a t-count value = 1.077 with a probability of 0.284 was

obtained. Where the t-count value < t-table and the significance value above 0.05 indicate that the Financial Attitude variable has no significant effect on Retirement Financial Planning at the level of 5%. Thus the **decision of the H3 Hypothesis is not accepted.**

Of the three independent variables incorporated into the regression model, only the Financial Behavior (FB) variable was significant at 0.05, while the Financial Knowledge (KL) and Financial Attitude (FA) variables were not significant at 0.05. From these results obtained mathematical equations as follows:

$$RP = 15.027 + 0.111KL + 0.400FB + 0.134FA + e$$

**f test (Simultaneous)**

The statistical test F on the dependent variable of Retirement Financial Planning was carried out to determine whether all the independent variables included in the regression model had a joint influence on the variable of Retirement Financial Planning. The results of the statistical test F on the dependent variable of the study based on the value of the F-table in the estimated 3.07 are as follows:

Table 6. Simultaneous Statistical Testing (F-test)

Dependent Variables	N	F-count	Sig.	Decision
Financial Planning for Retirement	128	2.166	0.095	H4 rejected

a. Predictors: (Constant), KL, FB, FA

b. F-table: 3.07

Source: Primary Data Processed, 2022.

From the F-test, an F-count value of 2,166 was obtained with a probability of 0.095. Where the F-value is calculated  $<$  the F-table value and the probability is above 0.05, it can be said that the variables Financial Knowledge (KL), Financial Behavior (FB) and Financial Attitude (FA) together have no effect on the variables of Retirement Financial Planning (RP). Thus the **decision of the H4 Hypothesis is not accepted.**

## DISCUSSION

### Dimensions of Financial Knowledge (KL)

Based on the results of the study, it was obtained that the dimension of Financial Knowledge in financial literacy has no effect on Retirement Financial Planning. The average score of the financial dimension of respondents is estimated at 5 where the majority of respondents are included in the sufficient literacy class.

Based on the results of the researcher's observations, respondents' concerns regarding the level of investment risk have not been well literate, this indicates the lack of knowledge and desire of respondents to make risky investments, on the other hand, respondents' knowledge regarding inflation levels has not been well literate so that it affects financial planning in retirement.

### Financial Behavior Dimension (FB)

Based on the results of the study, it was obtained that the dimension of Financial Behavior in financial literacy has a positive effect on Retirement

Financial Planning. The average score of the financial dimension of respondents is estimated at 7 where the majority of respondents are included in the *well literate* class.

Based on the results of researchers' observations on respondents' financial behavior, the majority of respondents have been active in saving and saving in other forms such as gold and piggy banks at home. On the other hand, respondents tend to avoid interest-bearing loans in the event of a short-term financial shortfall and provide reserves that are sufficient to affect the nominal savings which can result in the amount of funds prepared for retirement. The behavior of respondents in making choices in making decisions to buy a product and looking for comparative information has an impact on reducing consumptive behavior in spending money so that it can be allocated for savings in the future.

### Financial Attitude Dimension (FA)

Based on the results of the study, it was obtained that the dimension of Financial Attitude in financial literacy has no effect on Retirement Financial Planning. The average score of the financial dimension of respondents is estimated at 10 where the majority of respondents are included in a fairly good literacy class (sufficient literate).

Based on the results of researchers' observations on financial attitudes, respondents' attitudes towards personal finances still tend to have thoughts that personal funds exist for self-reward and are immediately spent both on the fulfillment of life

needs and the desire for a product, both goods and services. In addition, thinking about living for today and allowing tomorrow to think about later indicates the influence of financial management attitudes on financial planning in retirement.

## CONCLUSIONS AND SUGGESTIONS

The importance of financial literacy for the community in general is related to planning skills to financial management that must be owned. The conclusions that can be obtained from the results of this study are as follows:

1. Based on research, it was found that financial behavior has an influence on retirement financial planning while financial knowledge and attitudes have no effect. Of the overall factors that are the basis for measuring the level of financial literacy in the study, routine saving behavior is still the majority of ways used to prepare financial planning in retirement, saving media is carried out both through deposits at banks and gold investments. On the other hand, financial knowledge and attitudes have no effect on retirement planning because the interest in quartering funds in risky investments is still not optimal and tends to still place funds in non-risky assets.
2. In retirement financial planning, there are various ways for employees to plan finances in retirement such as attracting government pension funds such as Old Age Insurance (JHT) and obtaining profits from invested assets such as rental income on a property or profitability for investing in securities. In addition, ownership of a business before retirement is also a way that is quite widely used by employees to earn income after no longer working.

This study only looked at the level of financial literacy in one population so it cannot be generalized in general. On the other hand, there are still various

factors that can affect retirement financial planning in each individual. It is important to make further observations to strengthen the results of previous research research, so that it can add insight related to financial literacy which has an impact on retirement financial planning.

## REFERENCES

- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior And Human Decision Processes*, 50, 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Antoni, X., Saayman, M., & Vosloo, N. (2020). The Relationship Between Financial Literacy and Retirement Planning, Nelson Mandela Bay. *International Journal Of Business And Management Studies*, 12(2), 577–593.
- Atkinson, A., & Messy, F.-A. (2012). *Measuring Financial Literacy : Results of the OECD / International Network on Financial Education ( INFE ) Pilot Study* (No. 15; Issue 15). <https://doi.org/10.1787/5k9csfs90fr4-en>.
- Dewi, V. I., Febrian, E., Effendi, N., Anwar, M., & Nidar, R. S. (2020). Financial literacy and its variables: The evidence from Indonesia. *Economics & Sociology*, 13(3).
- Firli, A. (2017). Factors that Influence Financial Literacy : A Conceptual Framework. *IOP Conference Series: Materials Science and Engineering PAPER*, 1–7. <https://doi.org/10.1088/1742-6596/755/1/011001>
- Gallego-Losada, R., Montero-Navarro, A., Rodriguez-Sanchez, J.-L., & Gonzalez-Torres, T. (2021). Retirement Planning, And Financial Literacy, At The Crossroads: A Bibliometric Analysis. *Finance Research Letters*, 44(January). <https://doi.org/10.1016/j.frl.2021.102109>

- Ghozali, I. (2001). *Aplikasi Analisis Multivariate Dengan Program SPSS*. Semarang: Badan Penerbit Universitas Diponegoro.
- Huston, S. J. (2010). Measuring financial literacy. *The Journal of Consumer Affairs*, 44(2), 296–316.
- Hutabarat, A. S. S., & Wijaya, C. (2020). Analysis The Effect Of Financial Literacy On Financial Planning For Retirement (Case Study Lecturers And Administrative Staff In Universitas Indonesia). *International Journal of Management*, 11(5), 741–750. <https://doi.org/10.34218/IJM.11.5.2020.066>
- Lopus, J. S., Sulistyorini, D., & Grimes, P. W. (2019). Improving financial literacy of the poor and vulnerable in Indonesia : An empirical analysis. *International Review of Economics Education*, 32(June), 100168. <https://doi.org/10.1016/j.iree.2019.100168>
- Lusardi, A. (2008). *Financial Literacy: An Essential Tool For Informed Consumer Choice?* (No. 14084; JEL No. D14).
- Lusardi, A., Michaud, P.-C., & Mitchell, O. S. (2017). Optimal Financial Knowledge and Wealth Inequality. *Journal of Political Economy*, 125(2).
- Lusardi, A., & Mitchell, O. S. (2014). The Economic Importance Of Financial Literacy : Theory and Evidence. *Journal of Economic Literature*, 52(1), 5–44.
- Lusardi, A., & Tufano, P. (2009). *Debt Literacy, Financial Experiences, And Overindebtedness* (No. 14808; JEL No. D91).
- Ming-Yeh, T., & Yue, Y. (2021). Confidence in Financial Literacy , Stock Market Participation , and Retirement Planning. *Journal of Family and Economic Issues*, May. <https://doi.org/10.1007/s10834-021-09769-1>
- Mitchell, O. S., & Lusardi, A. (2015). Financial Literacy and Economic Outcomes: Evidence and Policy Implications. *J Retire*, 3(1), 107–114. <https://doi.org/10.3905/jor.2015.3.1.107>. Financial
- Niu, G., Zhou, Y., & Gan, H. (2020). Financial literacy and retirement preparation in China. *Pacific-Basin Finance Journal*, 59(May 2019). <https://doi.org/10.1016/j.pacfin.2020.101262>
- Noctor, M. S., & Stradling, R. (1992). *Financial literacy: a discussion of concepts and competences of financial literacy and opportunities for its introduction into young people's learning: Report prepared for the National Westminster Bank*.
- OECD. (2020). *OECD/INFE 2020 International Survey of Adult Financial Literacy*. Organization for Economics Cooperation and Development. [www.oecd.org/financial/education/launchoftheoecdinfeglobalfinancialliteracysurveyreport.htm](http://www.oecd.org/financial/education/launchoftheoecdinfeglobalfinancialliteracysurveyreport.htm)
- OJK. (2021). *Strategi Nasional Literasi Keuangan Indonesia (SNLKI) 2021-2025*. Otoritas Jasa Keuangan. <https://www.ojk.go.id/id/berita-dan-kegiatan/publikasi>
- PT. Adhi Karya (Persero) Tbk. (2021). *Laporan Tahunan 2021*.
- Rai, K., Dua, S., & Yadav, M. (2019). Association of Financial Attitude , Financial Behaviour and Financial Knowledge Towards Financial Literacy : A Structural Equation Modeling Approach. *FIIB Business Review*, 8(1), 51–60. <https://doi.org/10.1177/2319714519826651>
- Rameli, R. S., & Marimuthu, M. (2018). A Conceptual Review on the Effect of Attitudes towards Retirement on Saving Intentions and Retirement Planning Behavior. *SHS Web of Conferences* 56.

- Remund, D. L. (2010). Financial Literacy Explicated : The Case for a Clearer Definition in an Increasingly Complex Economy. *The Journal of Consumer Affairs*, 44(2), 276–295.
- Ricci, O., & Caratelli, M. (2017). Financial literacy , trust and retirement planning. *Journal of Pension Economics & Finance*, 16(1), 43–64. <https://doi.org/10.1017/S1474747215000177>
- Robb, C. A., & Woodyard, A. S. (2011). Financial Knowledge and Best Practice Behavior. *Journal of Financial Counseling and Planning*, 22(1), 60–70.
- Safari, K., Njoka, C., & Munkwa, M. G. (2021). Financial literacy and personal retirement planning : a socioeconomic approach. *Journal of Business and Socio-Economic Development*, 1(2), 121–134. <https://doi.org/10.1108/JBSED-04-2021-0052>
- Safitri, H., & Nurmiaswari, H. (2019). Pengembangan Literasi Keuangan Dengan Pengetahuan Tentang Investasi Bodong Di Desa Limbung Dusun Mulyorejo. *Buletin Al-Ribaath*, 16, 69–73.
- Sekita, S., Kakkar, V., & Ogaki, M. (2021). *Wealth , Financial Literacy and Behavioral Biases in Japan : the Effect of various Types of Financial Literacy* (No. 607; Issue 607).
- Sugiyono. (2014). *Metode Penelitian Kombinasi (Mixed Methods)*. Alfabeta.
- Sugiyono. (2019). *Statistika untuk Penelitian*. Alfabeta.
- Świecka, B. (2019). Financial literacy as a factor of cashless payments development. Results of survey. *European Journal of Service Management*, 27, 467–473. <https://doi.org/10.18276/ejasm.2018.27/2-57>
- Taft, M. K., Hosein, Z. Z., Mohammad, S., Mehrizi, T., & Roshan, A. (2013). The Relation between Financial Literacy , Financial Wellbeing and Financial Concerns. *International Journal of Business and Management*, 8(11), 63–75. <https://doi.org/10.5539/ijbm.v8n11p63>
- Tomar, S., Baker, H. K., Kumar, S., & Hoffmann, A. O. I. (2021). Psychological determinants of retirement financial planning behavior. *Journal of Business Research*, 133(May), 432–449. <https://doi.org/10.1016/j.jbusres.2021.05.007>
- Yushita, A. N. (2017). Pentingnya Literasi Keuangan Bagi Pengelolaan Keuangan Pribadi. *Junral Nominal*, VI(1)